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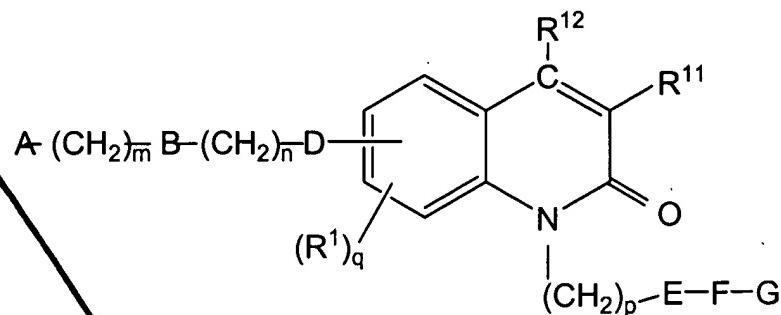
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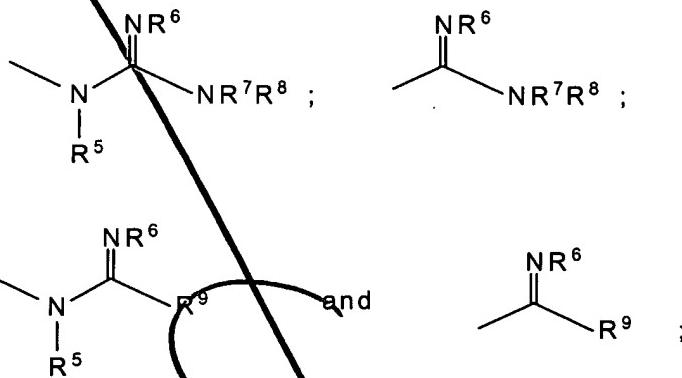
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wherein:

A is a member selected from the group consisting of:  $\text{R}^2$ ,  $-\text{NR}^3\text{R}^4$ ,  $-\text{C}(=\text{O})\text{NR}^3\text{R}^4$ ,



where  $\text{R}^2$ ,  $\text{R}^3$ ,  $\text{R}^4$ ,  $\text{R}^5$ ,  $\text{R}^6$ ,  $\text{R}^7$ ,  $\text{R}^8$ , and  $\text{R}^9$  are independently selected from the group consisting of H, -OH,  $\text{C}_{1-8}$ alkyl,  $\text{C}_{2-8}$ alkenyl,  $\text{C}_{2-8}$ alkynyl,  $\text{C}_{3-8}$ cycloalkyl,  $\text{C}_{6-12}$ carbocyclic aryl, a five to ten membered heterocyclic ring system having 1-4 heteroatoms selected from the group consisting of N, O and S; and  $\text{C}_{1-6}$ alkylheterocyclic ring system having in the ring system 5 to 10 atoms with 1 to 4 of such atoms being selected from the group consisting of N, O and S; where  $\text{R}^6$  taken with either of  $\text{R}^7$  and  $\text{R}^8$ , and/or  $\text{R}^7$  taken with  $\text{R}^8$ , can each form a 5 to 6 membered heterocyclic ring having from 1 to 4 atoms selected from the group consisting of N, O and S;

m is an integer from 0-3;

Z is a member selected from the group consisting of a direct link,  $\text{C}_{1-8}$ alkyl,  $\text{C}_{3-8}$ cycloalkyl,  $\text{C}_{2-8}$ alkenyl,  $\text{C}_{2-8}$ alkynyl,  $\text{C}_{1-8}$ carbocyclic aryl, or a five to ten membered

19 heterocyclic ring system having 1-4 heteroatoms selected from the group consisting of N,  
20 O and S;

21 n is an integer from 0-3;

22 D is a member selected from the group consisting of a direct link, -CH<sub>2</sub>-, -O-,  
23 -N(R<sup>2</sup>)-, -C(=O)-, -S-, -SO<sub>2</sub>-, -SO<sub>2</sub>-N(R<sup>2</sup>)-, -N(R<sup>2</sup>)-SO<sub>2</sub>-, -OC(=O)-, -C(=O)O-,  
24 -C(=O)-N(R<sup>2</sup>)- and -N(R<sup>2</sup>)-C(=O)-;

25 R<sup>1</sup> is a member selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl,  
26 C<sub>3-8</sub>cycloalkyl, halogen, polyhaloalkyl, C<sub>0-8</sub>alkyl-C(=O)OH,  
27 C<sub>0-8</sub>alkyl-C(=O)O-C<sub>1-8</sub>alkyl, -CN, -NO<sub>2</sub>, C<sub>1-8</sub>alkyl-OH, C<sub>0-8</sub>alkyl-SH, -C(=O)NR<sup>2</sup>R<sup>3</sup>,  
28 -O-R<sup>2</sup> and -O-C(=O)R<sup>2</sup>, an unsubstituted amino group, a mono- or di-substituted amino  
29 group, wherein the substituted amino groups are independently substituted by at least one  
30 member selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl,  
31 C<sub>3-8</sub>cycloalkyl, polyhaloalkyl, -SO<sub>2</sub>R<sup>2</sup>, C<sub>0-8</sub>alkyl-C(=O)OH and  
32 C<sub>0-8</sub>alkyl-C(=O)O-C<sub>1-8</sub>alkyl, where R<sup>2</sup> and R<sup>3</sup> is as described above;

33 q is an integer from 0-3;

34 R<sup>11</sup> and R<sup>12</sup> are independently a member selected from the group consisting of H,  
35 C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl, C<sub>3-8</sub>cycloalkyl, C<sub>6-12</sub>carbocyclic aryl, C<sub>1-6</sub>alkylaryl,  
36 C<sub>1-6</sub>alkyl-C<sub>3-8</sub>cycloalkyl, -O-R<sup>2</sup>, -O-C(=O)R<sup>2</sup>, -C<sub>1-8</sub>alkyl-O-R<sup>10</sup>, -C<sub>1-8</sub>alkyl-O-C(=O)R<sup>10</sup>,  
37 -C<sub>1-8</sub>alkyl-C(=O)OR<sup>10</sup>, -C<sub>1-8</sub>alkyl-O-C(=O)OR<sup>10</sup>, -C<sub>1-8</sub>alkyl-C(=O)NR<sup>10</sup>R<sup>10</sup>,  
38 -C<sub>1-8</sub>alkyl-NR<sup>10</sup>R<sup>10</sup>, -C<sub>1-8</sub>alkyl-NR<sup>10</sup>C(=O)R<sup>10</sup>, -SR<sup>10</sup>, where R<sup>2</sup> is as described above and  
39 R<sup>10</sup> is a member selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl,  
40 and wherein when two R<sup>10</sup> groups are present they may be taken together to  
41 form a saturated or unsaturated ring with the atom to which they are both attached;

42 p is an integer from 0-3;

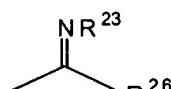
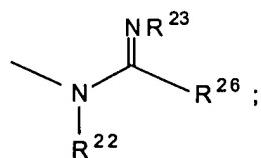
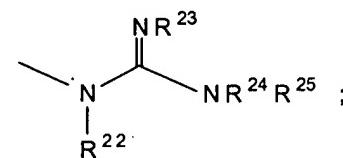
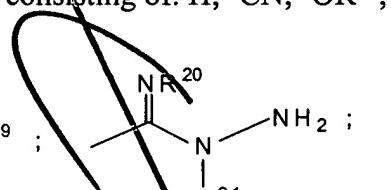
43 E is a member selected from the group consisting of a direct link, -O-, -N(-R<sup>11</sup>)- ,  
44 where R<sup>11</sup> is as set forth above, phenylene, a bivalent 5 to 12 member heteroaryl group  
45 having 1 to 4 heteroatoms selected from the group consisting of N, O and S, and a five to  
46 ten membered non-aromatic bivalent heterocyclic ring system having 1-4 heteroatoms

47 selected from the group consisting of N, O and S, wherein said heteroaryl and said non-  
48 aromatic heterocyclic ring structure may be independently substituted by from 0 to 5 R<sup>14</sup>  
49 groups;

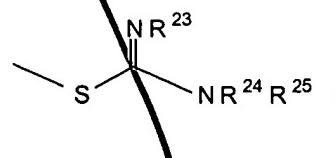
50 J is a member selected from the group consisting of a direct link, a bivalent  
51 C<sub>3-8</sub>cycloalkyl group, phenylene, a 5 to 12 member bivalent heteroaryl group having 1 to  
52 4 heteroatoms selected from the group consisting of N, O and S, and a five to ten  
53 membered non-aromatic bivalent heterocyclic ring system having 1-4 heteroatoms  
54 selected from the group consisting of N, O and S wherein said heteroaryl and said non-  
55 aromatic heterocyclic ring structure may be independently substituted by from 0 to 5 R<sup>14</sup>  
56 groups;

57 each R<sup>14</sup> group is a member selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>2-</sub>  
58 galkenyl, C<sub>2-8</sub>alkynyl, C<sub>3-8</sub>cycloalkyl, halogen, polyhaloalkyl, C<sub>0-8</sub>alkyl-C(=O)OH,  
59 C<sub>0-8</sub>alkyl-C(=O)O-C<sub>1-8</sub>alkyl, -CN, -NO<sub>2</sub>, C<sub>1-8</sub>alkyl-OH, C<sub>0-8</sub>alkyl-SH, -O-R<sup>2</sup> and  
60 -O-C(=O)R<sup>2</sup>, an unsubstituted amino group, a mono- or di-substituted amino group,  
61 wherein the substituted amino groups are independently substituted by at least one  
62 member selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl,  
63 C<sub>3-8</sub>cycloalkyl, polyhaloalkyl, C<sub>0-8</sub>alkyl-C(=O)OH and C<sub>0-8</sub>alkyl-C(=O)O-C<sub>1-8</sub>alkyl;

64 G is a member selected from the group consisting of: H; -CN; -OR<sup>17</sup>;



and



65 wherein

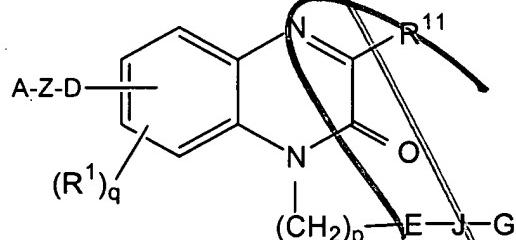
66 t is an integer from 0 to 6,

67 u is the integer 0 or 1, and R<sup>17</sup>, R<sup>18</sup>, R<sup>19</sup>, R<sup>20</sup>, R<sup>21</sup>, R<sup>22</sup>, R<sup>23</sup>, R<sup>24</sup>, R<sup>25</sup> and R<sup>26</sup> are  
68 independently selected from the group consisting of H, -OH, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>  
69 alkynyl, C<sub>3-8</sub>cycloalkyl, C<sub>6-12</sub>carbocyclic aryl, a five to ten membered heterocyclic ring  
70 system having 1-4 heteroatoms selected from the group consisting of N, O and S; and  
71 C<sub>1-6</sub>alkylheterocyclic ring system having in the ring system 5 to 10 atoms with 1 to 4 of  
72 such atoms being selected from the group consisting of N, O and S; where R<sup>18</sup> taken with  
73 R<sup>19</sup>, R<sup>22</sup> taken with either of R<sup>24</sup> and R<sup>25</sup>, and R<sup>24</sup> taken with R<sup>25</sup>, can each independently  
74 form a 5 to 6 membered heterocyclic ring having from 1 to 4 atoms selected from the  
75 group consisting of N, O and S;

76 with the proviso that when G is H, -CN, -OR<sup>17</sup>, either E or J must contain at least  
77 one N atom;

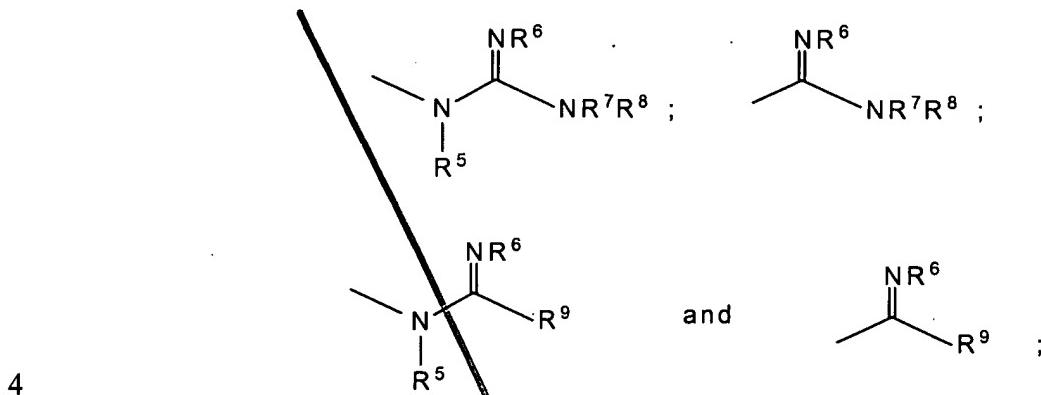
78 or a pharmaceutically acceptable diastereomer, salt, hydrate, and solvate thereof.

1 2. (Amended) A compound of formula II:



2

3 A is a member selected from the group consisting of:



5 where R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, and R<sup>9</sup> are independently selected from the group consisting of H,  
6 -OH, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl, C<sub>3-8</sub>cycloalkyl, C<sub>6-12</sub>carbocyclic aryl, a five to  
7 ten membered heterocyclic ring system having 1-4 heteroatoms selected from the group  
8 consisting of N, O and S; and C<sub>1-6</sub>alkylheterocyclic ring system having in the ring system  
9 5 to 10 atoms with 1 to 4 of such atoms being selected from the group consisting of N, O  
10 and S; where R<sup>6</sup> taken with either of R<sup>7</sup> and R<sup>8</sup>, and/or R<sup>7</sup> taken with R<sup>8</sup>, can each form a  
11 5 to 6 membered heterocyclic ring having from 1 to 4 atoms selected from the group  
12 consisting of N, O and S;

13 Z is a member selected from the group consisting of C<sub>1-8</sub>alkyl, C<sub>3-8</sub>cycloalkyl, C<sub>2-</sub>  
14 ~~g~~alkenyl, C<sub>2-8</sub>alkynyl, C<sub>1-8</sub>carbocyclic aryl, and a five to ten membered heterocyclic ring  
15 system having 1-4 heteroatoms selected from the group consisting of N, O and S;

16 D is a member selected from the group consisting of a direct link,  $-\text{CH}_2-$ ,  $-\text{O}-$ ,  
17  $-\text{N}(\text{R}^2)-$ ,  $-\text{C}(=\text{O})-$ ,  $-\text{S}-$ ,  $-\text{SO}_2-$ ,  $-\text{SO}_2\text{N}(\text{R}^2)-$ ,  $-\text{N}(\text{R}^2)\text{SO}_2-$ ,  $-\text{OC}(=\text{O})-$ ,  $-\text{C}(=\text{O})\text{O}-$ ,  
18  $-\text{C}(=\text{O})\text{N}(\text{R}^2)-$  and  $-\text{N}(\text{R}^2)\text{C}(=\text{O})-$ , provided that when Z is  $\text{C}_{1-8}\text{alkyl}$ ,  $\text{C}_{2-8}\text{alkenyl}$ ,  
19  $\text{C}_{2-8}\text{alkynyl}$ ,  $\text{C}_{1-8}\text{carbocyclic aryl}$ , then D is  $-\text{O}-$ , or  $-\text{N}(\text{R}^2)-$ ;

**20**            R<sup>1</sup> is a member selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl, C<sub>3-8</sub>cycloalkyl, halogen, polyhaloalkyl, C<sub>0-8</sub>alkyl-C(=O)OH,  
**21**            C<sub>0-8</sub>alkyl-C(=O)O-C<sub>1-8</sub>alkyl, -CN, -NO<sub>2</sub>, C<sub>1-8</sub>alkyl-OH, C<sub>0-8</sub>alkyl-SH, -C(=O)NR<sup>2</sup>R<sup>3</sup>,  
**22**            -O-R<sup>2</sup> and -O-C(=O)R<sup>2</sup>, an unsubstituted amino group, a mono- or di-substituted amino  
**23**            group.

24 group, wherein the substituted amino groups are independently substituted by at least one  
25 member selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl,  
26 C<sub>3-8</sub>cycloalkyl, polyhaloalkyl, -SO<sub>2</sub>R<sup>2</sup>, C<sub>0-8</sub>alkyl-C(=O)OH and  
27 C<sub>0-8</sub>alkyl-C(=O)Q-C<sub>1-8</sub>alkyl;

28 R<sup>2</sup> and R<sup>3</sup> are independently selected from the group consisting of H, -OH,  
29 C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl, C<sub>3-8</sub>cycloalkyl, C<sub>6-12</sub>carbocyclic aryl, a five to ten  
30 membered heterocyclic ring system having 1-4 heteroatoms selected from the group  
31 consisting of N, O and S; and C<sub>1-6</sub>alkylheterocyclic ring system having in the ring system  
32 5 to 10 atoms with 1 to 4 of such atoms being selected from the group consisting of N, O  
33 and S;

34 q is an integer from 0-3;

35 R<sup>11</sup> is independently a member selected from the group consisting of H, C<sub>1-8</sub>alkyl,  
36 C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl, C<sub>3-8</sub>cycloalkyl, C<sub>6-12</sub>carbocyclic aryl, C<sub>1-6</sub>alkylaryl,  
37 C<sub>1-6</sub>alkyl-C<sub>3-8</sub>cycloalkyl, -O-R<sup>2</sup>, -O-C(=O)R<sup>2</sup>, -C<sub>1-8</sub>alkyl-O-R<sup>10</sup>, -C<sub>1-8</sub>alkyl-O-C(=O)R<sup>10</sup>,  
38 -C<sub>1-8</sub>alkyl-C(=O)OR<sup>10</sup>, -C<sub>1-8</sub>alkyl-O-C(=O)OR<sup>10</sup>, -C<sub>1-8</sub>alkyl-C(=O)NR<sup>10</sup>R<sup>10</sup>,  
39 -C<sub>1-8</sub>alkyl-NR<sup>10</sup>R<sup>10</sup>, -C<sub>1-8</sub>alkyl-NR<sup>10</sup>C(=O)R<sup>10</sup>, -SR<sup>10</sup>, where R<sup>2</sup> is as described above and  
40 R<sup>10</sup> is a member selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>  
41 alkynyl, and wherein when two R<sup>10</sup> groups are present they may be taken together to  
42 form a saturated or unsaturated ring with the atom to which they are both attached;

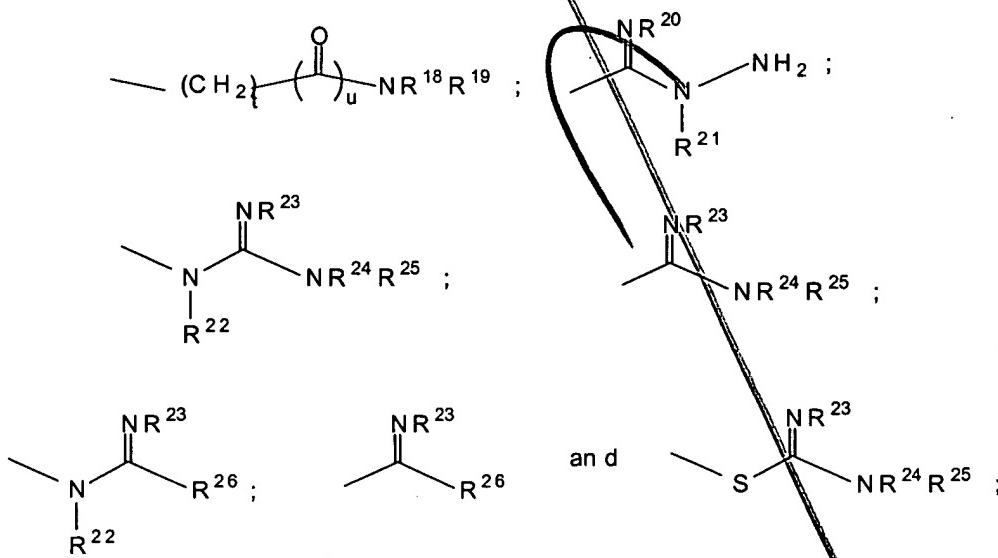
43 p is an integer from 0-2;

44 E is a member selected from the group consisting of a direct link, -O-, -N(-R<sup>11</sup>)- ,  
45 where R<sup>11</sup> is as set forth above, phenylene, a bivalent 5 to 12 member heteroaryl group  
46 having 1 to 4 heteroatoms selected from the group consisting of N, O and S, and a five to  
47 ten membered non-aromatic bivalent heterocyclic ring system having 1-4 heteroatoms  
48 selected from the group consisting of N, O and S, wherein said heteroaryl and said non-  
49 aromatic heterocyclic ring structure may be independently substituted by from 0 to 5 R<sup>14</sup>  
50 groups;

51        J is a member selected from the group consisting of a direct link, a bivalent  
52        C<sub>3-8</sub>cycloalkyl group, phenylene, a 5 to 12 member bivalent heteroaryl group having 1 to  
53        4 heteroatoms selected from the group consisting of N, O and S, and a five to ten  
54        membered non-aromatic bivalent heterocyclic ring system having 1-4 heteroatoms  
55        selected from the group consisting of N, O and S wherein said heteroaryl and said non-  
56        aromatic heterocyclic ring structure may be independently substituted by from 0 to 5 R<sup>14</sup>  
57        groups;

58        each R<sup>14</sup> group is a member selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>2-</sub>  
59        alkenyl, C<sub>2-8</sub>alkynyl, C<sub>3-8</sub>cycloalkyl, halogen, polyhaloalkyl, C<sub>0-8</sub>alkyl-C(=O)OH,  
60        C<sub>0-8</sub>alkyl-C(=O)O-C<sub>1-8</sub>alkyl, -CN, -NO<sub>2</sub>, C<sub>1-8</sub>alkyl-OH, C<sub>0-8</sub>alkyl-SH, -O-R<sup>2</sup> and  
61        -O-C(=O)R<sup>2</sup>, an unsubstituted amino group, a mono- or di-substituted amino group,  
62        wherein the substituted amino groups are independently substituted by at least one  
63        member selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl,  
64        C<sub>3-8</sub>cycloalkyl, polyhaloalkyl, C<sub>0-8</sub>alkyl-C(=O)OH and C<sub>0-8</sub>alkyl-C(=O)O-C<sub>1-8</sub>alkyl;

65        G is a member selected from the group consisting of: H; -CN; -OR<sup>17</sup>;



66        wherein

67        t is an integer from 0 to 6,

68        u is the integer 0 or 1, and R<sup>17</sup>, R<sup>18</sup>, R<sup>19</sup>, R<sup>20</sup>, R<sup>21</sup>, R<sup>22</sup>, R<sup>23</sup>, R<sup>24</sup>, R<sup>25</sup> and R<sup>26</sup> are  
69        independently selected from the group consisting of H, -OH, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-</sub>  
70        alkynyl, C<sub>3-8</sub>cycloalkyl, C<sub>6-12</sub>carbocyclic aryl, a five to ten membered heterocyclic ring  
71        system having 1-4 heteroatoms selected from the group consisting of N, O and S; and  
72        C<sub>1-6</sub>alkylheterocyclic ring system having in the ring system 5 to 10 atoms with 1 to 4 of  
73        such atoms being selected from the group consisting of N, O and S; where R<sup>18</sup> taken with  
74        R<sup>19</sup>, R<sup>22</sup> taken with either of R<sup>24</sup> and R<sup>25</sup>, and R<sup>24</sup> taken with R<sup>25</sup>, can each independently  
75        form a 5 to 6 membered heterocyclic ring having from 1 to 4 atoms selected from the  
76        group consisting of N, O and S;

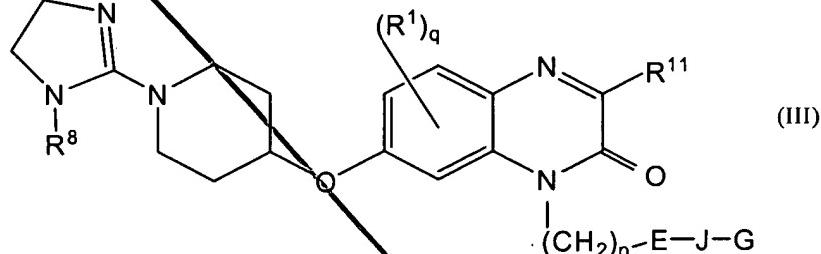
77        with the proviso that when G is H, -CN, -OR<sup>17</sup>, either E or J must contain at least  
78        one N atom;

79        or a pharmaceutically acceptable diastereomer, salt, hydrate, and solvate thereof.

80

1        5. (Amended) A compound of formula III:

2



wherein:

R<sup>8</sup> is selected from the group consisting of H, -OH, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-</sub>  
alkynyl, C<sub>3-8</sub>cycloalkyl, C<sub>6-12</sub>carbocyclic aryl, a five to ten membered heterocyclic ring  
system having 1-4 heteroatoms selected from the group consisting of N, O and S; and  
C<sub>1-6</sub>alkylheterocyclic ring system having in the ring system 5 to 10 atoms with 1 to 4 of  
such atoms being selected from the group consisting of N, O and S;

10        R<sup>1</sup> is a member selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl, C<sub>3-8</sub>cycloalkyl, halogen, polyhaloalkyl, C<sub>0-8</sub>alkyl-C(=O)OH,  
11        C<sub>0-8</sub>alkyl-C(=O)O-C<sub>1-8</sub>alkyl, -CN, -NO<sub>2</sub>, C<sub>1-8</sub>alkyl-OH, C<sub>0-8</sub>alkyl-SH, -C(=O)NR<sup>2</sup>R<sup>3</sup>,  
12        -O-R<sup>2</sup> and -O-C(=O)R<sup>2</sup>, an unsubstituted amino group, a mono- or di-substituted amino  
13        group, wherein the substituted amino groups are independently substituted by at least one  
14        member selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl,  
15        C<sub>3-8</sub>cycloalkyl, polyhaloalkyl, -SO<sub>2</sub>R<sup>2</sup>, C<sub>0-8</sub>alkyl-C(=O)OH and  
16        C<sub>0-8</sub>alkyl-C(=O)O-C<sub>1-8</sub>alkyl, where R<sup>2</sup> and R<sup>3</sup> is as described above;

17  
18        R<sup>2</sup> is selected from the group consisting of H, -OH, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl, C<sub>3-8</sub>cycloalkyl, C<sub>6-12</sub>carbocyclic aryl, a five to ten membered heterocyclic ring  
19        system having 1-4 heteroatoms selected from the group consisting of N, O and S; and  
20        C<sub>1-6</sub>alkylheterocyclic ring system having in the ring system 5 to 10 atoms with 1 to 4 of  
21        such atoms being selected from the group consisting of N, O and S;  
22  
23        q is 0-3;

24        R<sup>11</sup> is a member selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl,  
25        C<sub>2-8</sub>alkynyl, C<sub>3-8</sub>cycloalkyl, C<sub>6-12</sub>carbocyclic aryl, C<sub>1-6</sub>alkylaryl, C<sub>1-6</sub>alkyl-C<sub>3-8</sub>cycloalkyl,  
26        -O-R<sup>2</sup>, -O-C(=O)R<sup>2</sup>, -C<sub>1-8</sub>alkyl-O-R<sup>10</sup>, -C<sub>1-8</sub>alkyl-O-C(=O)R<sup>10</sup>, -C<sub>1-8</sub>alkyl-C(=O)OR<sup>10</sup>,  
27        -C<sub>1-8</sub>alkyl-O-C(=O)OR<sup>10</sup>, -C<sub>1-8</sub>alkyl-C(=O)NR<sup>10</sup>R<sup>10</sup>, -C<sub>1-8</sub>alkyl-NR<sup>10</sup>R<sup>10</sup>,  
28        -C<sub>1-8</sub>alkyl-NR<sup>10</sup>C(=O)R<sup>10</sup>, -SR<sup>10</sup>, where R<sup>2</sup> is as described above and R<sup>10</sup> is a member  
29        selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl, and wherein  
30        when two R<sup>10</sup> groups are present they may be taken together to form a saturated or  
31        unsaturated ring with the atom to which they are both attached;

32        p is an integer from 0-2;

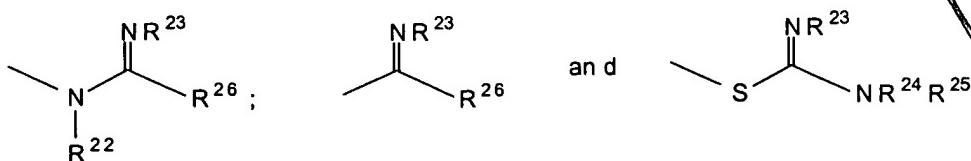
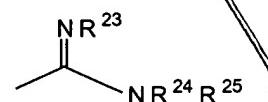
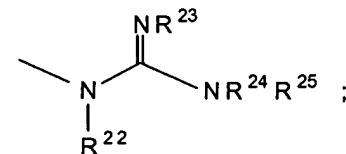
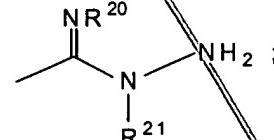
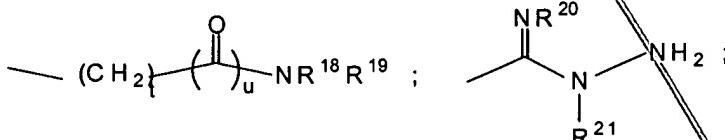
33        E is a member selected from the group consisting of a direct link, -O-, -N(-R<sup>11</sup>)- ,  
34        where R<sup>11</sup> is as set forth above, phenylene, a bivalent 5 to 12 member heteroaryl group  
35        having 1 to 4 heteroatoms selected from the group consisting of N, O and S, and a five to  
36        ten membered non-aromatic bivalent heterocyclic ring system having 1-4 heteroatoms

37 selected from the group consisting of N, O and S, wherein said heteroaryl and said non-  
38 aromatic heterocyclic ring structure may be independently substituted by from 0 to 5 R<sup>14</sup>  
39 groups;

40 J is a member selected from the group consisting of a direct link, a bivalent  
41 C<sub>3-8</sub>cycloalkyl group, phenylene, a 5 to 12 member bivalent heteroaryl group having 1 to  
42 4 heteroatoms selected from the group consisting of N, O and S, and a five to ten  
43 membered non-aromatic bivalent heterocyclic ring system having 1-4 heteroatoms  
44 selected from the group consisting of N, O and S wherein said heteroaryl and said non-  
45 aromatic heterocyclic ring structure may be independently substituted by from 0 to 5 R<sup>14</sup>  
46 groups;

47 each R<sup>14</sup> group is a member selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>2-</sub>  
48 alkenyl, C<sub>2-8</sub>alkynyl, C<sub>3-8</sub>cycloalkyl, halogen, polyhaloalkyl, C<sub>0-8</sub>alkyl-C(=O)OH,  
49 C<sub>0-8</sub>alkyl-C(=O)O-C<sub>1-8</sub>alkyl, -CN, -NO<sub>2</sub>, C<sub>1-8</sub>alkyl-OH, C<sub>0-8</sub>alkyl-SH, -O-R<sup>2</sup> and  
50 -O-C(=O)R<sup>2</sup>, an unsubstituted amino group, a mono- or di-substituted amino group,  
51 wherein the substituted amino groups are independently substituted by at least one  
52 member selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl,  
53 C<sub>3-8</sub>cycloalkyl, polyhaloalkyl, C<sub>0-8</sub>alkyl-C(=O)OH and C<sub>0-8</sub>alkyl-C(=O)O-C<sub>1-8</sub>alkyl;

54 G is a member selected from the group consisting of: H; -CN; -OR<sup>17</sup>;



55 wherein

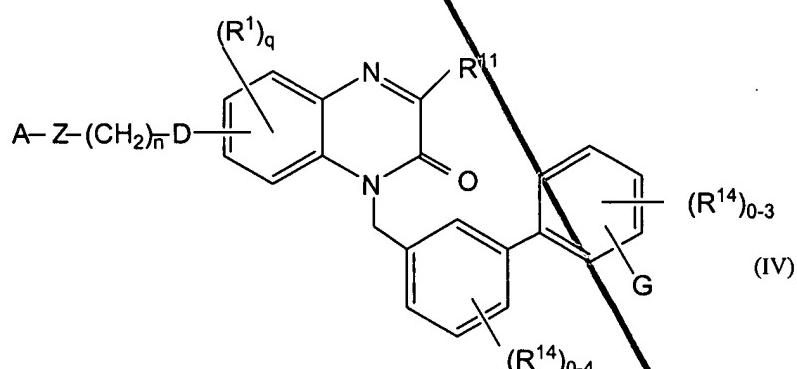
56 *t* is an integer from 0 to 6,

57 *u* is the integer 0 or 1, and  $R^{17}$ ,  $R^{18}$ ,  $R^{19}$ ,  $R^{20}$ ,  $R^{21}$ ,  $R^{22}$ ,  $R^{23}$ ,  $R^{24}$ ,  $R^{25}$  and  $R^{26}$  are  
58 independently selected from the group consisting of H, -OH,  $C_{1-8}$ alkyl,  $C_{2-8}$ alkenyl,  $C_{2-8}$   
59 alkynyl,  $C_{3-8}$ cycloalkyl,  $C_{6-12}$ carbocyclic aryl, a five to ten membered heterocyclic ring  
60 system having 1-4 heteroatoms selected from the group consisting of N, O and S; and  
61  $C_{1-6}$ alkylheterocyclic ring system having in the ring system 5 to 10 atoms with 1 to 4 of  
62 such atoms being selected from the group consisting of N, O and S; where  $R^{18}$  taken with  
63  $R^{19}$ ,  $R^{22}$  taken with either of  $R^{24}$  and  $R^{25}$ , and  $R^{24}$  taken with  $R^{25}$ , can each independently  
64 form a 5 to 6 membered heterocyclic ring having from 1 to 4 atoms selected from the  
65 group consisting of N, O and S;

66 with the proviso that when G is H, -CN, -OR<sup>17</sup>, either E or J must contain at least  
67 one N atom;

68 or a pharmaceutically acceptable diasteromer, salt, hydrate, and solvate thereof.

1 9. A compound of formula IV:

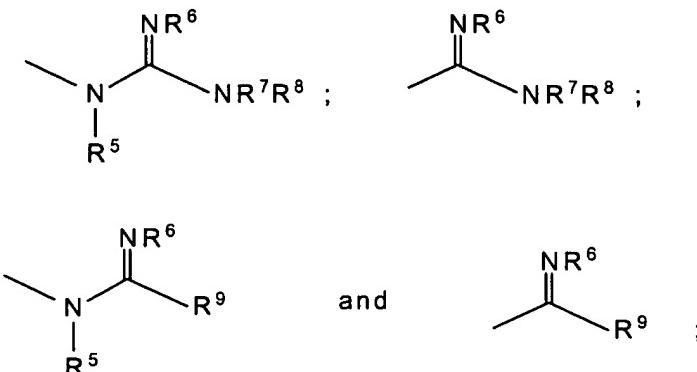


2

3 wherein:

4 A is a member selected from the group consisting of:  $R^2$ ,  $-NR^3R^4$ ,  $-C(=O)NR^3R^4$ ,

*a<sup>3</sup>*  
*C1*  
*cont*



where R<sup>2</sup>, R<sup>3</sup>, R<sup>4</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup>, and R<sup>9</sup> are independently selected from the group consisting of H, -OH, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl, C<sub>3-8</sub>cycloalkyl, C<sub>6-12</sub>carbocyclic aryl, a five to ten membered heterocyclic ring system having 1-4 heteroatoms selected from the group consisting of N, O and S; and C<sub>1-6</sub>alkylheterocyclic ring system having in the ring system 5 to 10 atoms with 1 to 4 of such atoms being selected from the group consisting of N, O and S; where R<sup>6</sup> taken with either of R<sup>7</sup> and R<sup>8</sup>, and/or R<sup>7</sup> taken with R<sup>8</sup>, can each form a 5 to 6 membered heterocyclic ring having from 1 to 4 atoms selected from the group consisting of N, O and S;

Z is a member selected from the group consisting of a direct link, C<sub>1-8</sub>alkyl, C<sub>3-8</sub>cycloalkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl, C<sub>1-8</sub>carbocyclic aryl, or a five to ten membered heterocyclic ring system having 1-4 heteroatoms selected from the group consisting of N, O and S;

n is 0-3;

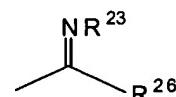
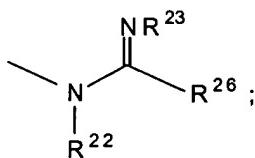
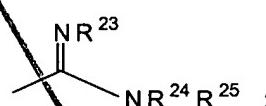
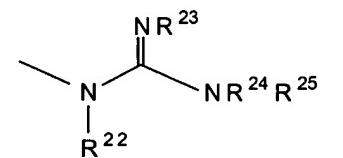
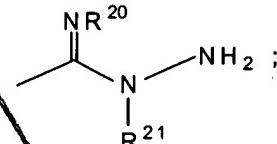
D is a member selected from the group consisting of -CH<sub>2</sub>-, -O-, -N R<sup>2</sup>, -C(=O)-, -S-, -SO<sub>2</sub>-, -SO<sub>2</sub>-NR<sup>2</sup>, -NR<sup>2</sup>-SO<sub>2</sub>, -OC(=O)-, -C(=O)NR<sup>2</sup>, and -NR<sup>2</sup>-C(=O)-;

R<sup>1</sup> and R<sup>14</sup> are independently a member selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl, C<sub>3-8</sub>cycloalkyl, halogen, polyhaloalkyl, C<sub>0-8</sub>alkyl-C(=O)OH, C<sub>0-8</sub>alkyl-C(=O)O-C<sub>1-8</sub>alkyl, -CN, -NO<sub>2</sub>, C<sub>1-8</sub>alkyl-OH, C<sub>0-8</sub>alkyl-SH, -O-R<sup>2</sup> and -O-C(=O)R<sup>2</sup>, an unsubstituted amino group, a mono- or di-substituted amino group, wherein the substituted amino groups are independently

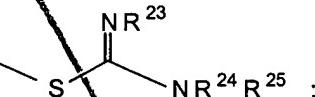
26 substituted by at least one member selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl, C<sub>3-8</sub>cycloalkyl, polyhaloalkyl, C<sub>0-8</sub>alkyl-C(=O)OH and  
27 C<sub>0-8</sub>alkyl-C(=O)O-C<sub>1-8</sub>alkyl;  
28 q is 0-3;

29           R<sup>11</sup> is a member selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl,  
30 C<sub>2-8</sub>alkynyl, C<sub>3-8</sub>cycloalkyl, C<sub>6-12</sub>carbocyclic aryl, C<sub>1-6</sub>alkylaryl, C<sub>1-6</sub>alkyl-C<sub>3-8</sub>cycloalkyl,  
31 -O-R<sup>2</sup>, -O-C(=O)R<sup>2</sup>, -C<sub>1-8</sub>alkyl-O-R<sup>10</sup>, -C<sub>1-8</sub>alkyl-O-C(=O)R<sup>10</sup>, -C<sub>1-8</sub>alkyl-C(=O)OR<sup>10</sup>,  
32 -C<sub>1-8</sub>alkyl-O-C(=O)OR<sup>10</sup>, -C<sub>1-8</sub>alkyl-C(=O)NR<sup>10</sup>R<sup>10</sup>, -C<sub>1-8</sub>alkyl-NR<sup>10</sup>R<sup>10</sup>,  
33 -C<sub>1-8</sub>alkyl-NR<sup>10</sup>C(=O)R<sup>10</sup>, -SR<sup>10</sup>, where R<sup>2</sup> is as described above and R<sup>10</sup> is a member  
34 selected from the group consisting of H, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl, and wherein  
35 when two R<sup>10</sup> groups are present they may be taken together to form a saturated or  
36 unsaturated ring with the atom to which they are both attached;  
37

38 G is a member selected from the group consisting of: H; -CN; -OR<sup>17</sup>;



and



39 wherein

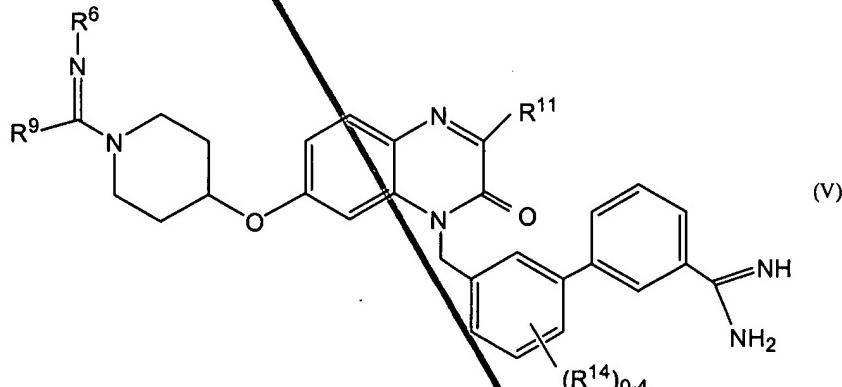
40 t is an integer from 0 to 6,

41 u is the integer 0 or 1, and R<sup>17</sup>, R<sup>18</sup>, R<sup>19</sup>, R<sup>20</sup>, R<sup>21</sup>, R<sup>22</sup>, R<sup>23</sup>, R<sup>24</sup>, R<sup>25</sup> and R<sup>26</sup> are

*A3*  
*C1*  
*cont*

42 independently selected from the group consisting of H, -OH, C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-</sub>  
43 alkynyl, C<sub>3-8</sub>cycloalkyl, C<sub>6-12</sub>carbocyclic aryl, a five to ten membered heterocyclic ring  
44 system having 1-4 heteroatoms selected from the group consisting of N, O and S; and  
45 C<sub>1-6</sub>alkylheterocyclic ring system having in the ring system 5 to 10 atoms with 1 to 4 of  
46 such atoms being selected from the group consisting of N, O and S; where R<sup>18</sup> taken with  
47 R<sup>19</sup>, R<sup>22</sup> taken with either of R<sup>24</sup> and R<sup>25</sup>, and R<sup>24</sup> taken with R<sup>25</sup>, can each independently  
48 form a 5 to 6 membered heterocyclic ring having from 1 to 4 atoms selected from the  
49 group consisting of N, O and S;  
50 with the proviso that when G is H, -CN, -OR<sup>17</sup>, either E or J must contain at least  
51 one N atom;  
52 or a pharmaceutically acceptable diasteromer, salt, hydrate, and solvate thereof.

*A4*  
1 11. A compound of formula V:



2  
3 wherein:  
4 R<sup>2</sup>, R<sup>6</sup>, and R<sup>9</sup> are independently selected from the group consisting of H, -OH,  
5 C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl, C<sub>3-8</sub>cycloalkyl, C<sub>6-12</sub>carbocyclic aryl, a five to ten  
6 membered heterocyclic ring system having 1-4 heteroatoms selected from the group  
7 consisting of N, O and S; and C<sub>1-6</sub>alkylheterocyclic ring system having in the ring system  
8 5 to 10 atoms with 1 to 4 of such atoms being selected from the group consisting of N, O  
9 and S;  
10 R<sup>11</sup> is independently a member selected from the group consisting of H,  
11 C<sub>1-8</sub>alkyl, C<sub>2-8</sub>alkenyl, C<sub>2-8</sub>alkynyl, C<sub>3-8</sub>cycloalkyl, C<sub>6-12</sub>carbocyclic aryl, C<sub>1-6</sub>alkylaryl,